THE DOE RUN COMPANY

Remediation Group

Mark Nations
Mining Properties Manager
mnations@doerun.com

November 11, 2013

Mr. Jason Gunter
Remedial Project Manager
U.S. Environmental Protection Agency
Region 7 - Superfund Branch
11201 Renner Blvd.
Lenexa, KS 66219

Re: National Mine Tailings Site Progress Report

Dear Mr. Gunter:

As required by Article VI, Section 51 of the Unilateral Administrative Order (Docket No.CERCLA-07-2006-0231) for the referenced project and on behalf of The Doe Run Company and NL Industries, Inc., the progress report for the period October 1, 2013 through October 31, 2013 is enclosed. If you have any questions or comments, please call me 573-518-0800.

Sincerely,

Mark Nations
Mining Properties Manager

Enclosure
c: Jason England – TDRC
Mark Yingling – TDRC (electronic only)
Matt Wohl – TDRC (electronic only)
Kevin Lombardozzi – NL Industries, Inc.
Matt Whitwell – City of Park Hills
Norm Lucas – Park Hills – Leadington Chamber of Commerce
Robert Hinkson – MDNR
Ty Morris – Barr Engineering
Brandon Wiles – MDNR

07CR

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1221 Mill Street, Leadwood, MO 63653
Telephone: (573) 562-7793

National Mine Tailings Site
Park Hills, Missouri
Removal Action - Monthly Progress Report
Period: October 1, 2013 – October 31, 2013

1. **Actions Performed and Problems Encountered This Period:**
   a. Barr and Doe Run staff continued to work with the landowners to determine the best way to access the mine shaft located in the Mine Shaft Area, as well as to verify who owns the property where the mine shaft is located. As of the end of the period, access issues had been resolved.
   b. During the period, rehabilitation activities on the mine shaft located in the Mine Shaft Area began. This work focused on removing loose damaged concrete, replacing any of the damaged concrete that was removed, and sealing a couple of holes in the existing concrete. As of the end of the period, work on this task had been completed.
   c. Work continued on the development of the Removal Action Report.

2. **Analytical Data and Results Received This Period:**
   a. During this period, water samples were collected at the sampling locations identified in Appendix C of the Removal Action Work Plan where water was present. Copies of the analytical results from the last sampling event are included with this progress report.
   b. During this period, the Ambient Air Monitoring Report for July 2013 was completed. Any issues identified in this report are discussed below. A copy of this document has been sent to your attention.

      The July 2013 Ambient Air Monitoring Report noted the following:

      - The action levels for lead and dust were not exceeded.
      - No samples were taken with the TSP monitors on 07/04/13 and 07/05/13 due to the holiday.
      - No samples were taken with the PM_{10} monitors on 07/06/13 due to the holiday.
      - No sample was taken on the Big River #4 TSP monitor on 07/29/13 due to the run time of the monitor being outside of the acceptable limits. This issue has been addressed.
      - Chain of custody date issues were corrected for the Big River #4 QA TSP monitor for filter ID numbers 8803575 and 8803551.

3. **Developments Anticipated and Work Scheduled for Next Period:**
   a. Complete rehabilitation activities on the mine shaft located in the Mine Shaft Area.
   b. Continue developing the Removal Action Report.
   c. Complete monthly water sampling activities as described in the Removal Action Work Plan.
   d. Complete air monitoring activities as described in the Removal Action Work Plan.

4. **Changes in Personnel:**
   a. None.

5. **Issues or Problems Arising This Period:**
   a. None.

6. **Resolution of Issues or Problems Arising This Period:**
   a. None.

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

October 21, 2013

Amy Sanders
The Doe Run Company
P. O. Box 500
Viburnum, MO 65566

RE: Project: NATIONAL UAO (NATIONAL)
Pace Project No.: 60155242

Dear Amy Sanders:
Enclosed are the analytical results for sample(s) received by the laboratory on October 11, 2013. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jamie Church

jamie.church@pacelabs.com
Project Manager

Enclosures

Pace Analytical Services, Inc.
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CERTIFICATIONS

Project: NATIONAL UAO (NATIONAL)
Pace Project No.: 60155242

Kansas Certification IDs
9608 Loiret Boulevard, Lenexa, KS 66219
WY STR Certification #: 2456.01
Arkansas Certification #: 13-012-0
Illinois Certification #: 003097
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10116
Louisiana Certification #: 03055
Nevada Certification #: KS000212008A
Oklahoma Certification #: 9205/9935
Texas Certification #: T104704407-13-4
Utah Certification #: KS000212013-3
Illinois Certification #: 003097

Dallas Certification IDs
400 West Bethany Dr Suite 190 75013 Allen TX 75013
Texas Certification #: T104704232-13-5
Kansas Certification #: E-10388
Arkansas Certification #: 88-0647
Oklahoma Certification #: 2012-080
Louisiana Certification #: 02007

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
9608 Loiret Blvd.
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SAMPLE SUMMARY

Project: NATIONAL UAO (NATIONAL)
Pace Project No.: 60155242

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60155242001	**10835/NAT NE**	Water	10/10/13 12:50	10/11/13 08:40

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(913)599-5665

SAMPLE ANALYTE COUNT

Project: NATIONAL UAO (NATIONAL)
Pace Project No.: 60155242

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60155242001	**10835/NAT NE**	EPA 200.7	SMW	3	PASI-K
		EPA 200.8	JGP	3	PASI-K
		EPA 200.8	JGP	3	PASI-K
		SM 2540C	RAH	1	PASI-K
		SM 2540D	RAH	1	PASI-K
		SM 2540F	RAH	1	PASI-K
		SM 4500-H+B	JML	1	PASI-K
		EPA 300.0	OL	1	PASI-K
		SM 5310C	MCP	1	PASI-D

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ANALYTICAL RESULTS

Project: NATIONAL UAO (NATIONAL)
Pace Project No.: 60155242

Sample: 10835/NAT NE **Lab ID: 60155242001** Collected: 10/10/13 12:50 Received: 10/11/13 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7								
Calcium	**97200**	ug/L	100	10.4	1	10/14/13 15:50	10/16/13 17:47	7440-70-2	
Magnesium	**54400**	ug/L	50.0	6.5	1	10/14/13 15:50	10/16/13 17:47	7439-95-4	
Total Hardness by 2340B	**467000**	ug/L	500		1	10/14/13 15:50	10/16/13 17:47		
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8								
Cadmium	**0.29J**	ug/L	0.50	0.050	1	10/16/13 11:00	10/17/13 14:28	7440-43-9	
Lead	**6.2**	ug/L	1.0	0.030	1	10/16/13 11:00	10/17/13 14:28	7439-92-1	
Zinc	**102**	ug/L	10.0	1.0	1	10/16/13 11:00	10/17/13 14:28	7440-66-6	
200.8 ICPMS, Dissolved (LF)	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8								
Cadmium, Dissolved	ND	ug/L	0.50	0.050	1	10/14/13 20:30	10/16/13 15:58	7440-43-9	
Lead, Dissolved	**4.2**	ug/L	1.0	0.030	1	10/14/13 20:30	10/16/13 15:58	7439-92-1	
Zinc, Dissolved	**81.4**	ug/L	10.0	1.0	1	10/14/13 20:30	10/16/13 15:58	7440-66-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C								
Total Dissolved Solids	**604**	mg/L	5.0	5.0	1		10/16/13 14:51		
2540D Total Suspended Solids	Analytical Method: SM 2540D								
Total Suspended Solids	ND	mg/L	5.0	5.0	1		10/16/13 11:39		
2540F Total Settleable Solids	Analytical Method: SM 2540F								
Total Settleable Solids	ND	mL/L/hr	0.20	0.20	1		10/11/13 12:35		
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**8.2**	Std. Units	0.10	0.10	1		10/12/13 09:00		H6
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	**215**	mg/L	20.0	3.2	20		10/18/13 11:21	14808-79-8	
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**0.81**	mg/L	0.50	0.25	1		10/15/13 14:58	7440-44-0	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
9608 Loiret Blvd.
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QUALITY CONTROL DATA

Project: NATIONAL UAO (NATIONAL)
Pace Project No.: 60155242

QC Batch: MPRP/24716 Analysis Method: EPA 200.7
QC Batch Method: EPA 200.7 Analysis Description: 200.7 Metals, Total
Associated Lab Samples: 60155242001

METHOD BLANK: 1271673 Matrix: Water
Associated Lab Samples: 60155242001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Calcium	ug/L	ND	100	10/16/13 16:23	
Magnesium	ug/L	ND	50.0	10/16/13 16:23	
Total Hardness by 2340B	ug/L	ND	500	10/16/13 16:23	

LABORATORY CONTROL SAMPLE: 1271674

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	ug/L	10000	9940	99	85-115	
Magnesium	ug/L	10000	9760	98	85-115	
Total Hardness by 2340B	ug/L		65000			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1271675 1271676

Parameter	Units	60155085001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	ug/L		10000	10000	166000	163000	128	92	70-130	2	9	
Magnesium	ug/L		10000	10000	20600	20100	100	95	70-130	3	9	
Total Hardness by 2340B	ug/L	427000			500000	489000				2		

MATRIX SPIKE SAMPLE: 1271677

Parameter	Units	60155118002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Calcium	ug/L	31.2 mg/L	10000	41900	106	70-130	
Magnesium	ug/L	3.2 mg/L	10000	13000	98	70-130	
Total Hardness by 2340B	ug/L	91.1 mg/L		158000			

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: NATIONAL UAO (NATIONAL)
Pace Project No.: 60155242

QC Batch: MPRP/24708
QC Batch Method: EPA 200.8
Analysis Method: EPA 200.8
Analysis Description: 200.8 MET
Associated Lab Samples: 60155242001

METHOD BLANK: 1271551 Matrix: Water
Associated Lab Samples: 60155242001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cadmium	ug/L	ND	0.50	10/17/13 13:25	
Lead	ug/L	ND	1.0	10/17/13 13:25	
Zinc	ug/L	1.1J	10.0	10/17/13 13:25	

LABORATORY CONTROL SAMPLE: 1271552

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cadmium	ug/L	40	40.5	101	85-115	
Lead	ug/L	40	37.5	94	85-115	
Zinc	ug/L	100	105	105	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1271553 1271554

Parameter	Units	60155238001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cadmium	ug/L	0.067J	40	40	38.6	39.6	96	99	70-130	2	20	
Lead	ug/L	1.9	40	40	39.0	39.7	93	95	70-130	2	20	
Zinc	ug/L	133	100	100	228	228	95	95	70-130	0	20	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: NATIONAL UAO (NATIONAL)
Pace Project No.: 60155242

QC Batch: MPRP/24733
QC Batch Method: EPA 200.8
Analysis Method: EPA 200.8
Analysis Description: 200.8 MET Dissolved
Associated Lab Samples: 60155242001

METHOD BLANK: 1271842 Matrix: Water
Associated Lab Samples: 60155242001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cadmium, Dissolved	ug/L	ND	0.50	10/16/13 15:37	
Lead, Dissolved	ug/L	ND	1.0	10/16/13 15:37	
Zinc, Dissolved	ug/L	ND	10.0	10/16/13 15:37	

LABORATORY CONTROL SAMPLE: 1271843

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cadmium, Dissolved	ug/L	40	41.4	103	85-115	
Lead, Dissolved	ug/L	40	40.0	100	85-115	
Zinc, Dissolved	ug/L	100	112	112	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1271844 1271845

Parameter	Units	60155241001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cadmium, Dissolved	ug/L	0.16J	40	40	39.8	38.9	99	97	70-130	2	20	
Lead, Dissolved	ug/L	0.40J	40	40	41.6	41.0	103	102	70-130	2	20	
Zinc, Dissolved	ug/L	103	100	100	200	200	97	97	70-130	0	20	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: NATIONAL UAO (NATIONAL)
Pace Project No.: 60155242

QC Batch: WET/44041
QC Batch Method: SM 2540C
Analysis Method: SM 2540C
Analysis Description: 2540C Total Dissolved Solids
Associated Lab Samples: 60155242001

METHOD BLANK: 1272770 Matrix: Water
Associated Lab Samples: 60155242001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	5.0	10/16/13 14:46	

LABORATORY CONTROL SAMPLE: 1272771

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	940	94	80-120	

SAMPLE DUPLICATE: 1272772

Parameter	Units	60155124003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	2900	2900	0	17	

SAMPLE DUPLICATE: 1272773

Parameter	Units	60155143008 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	291	304	4	17	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: NATIONAL UAO (NATIONAL)
Pace Project No.: 60155242

QC Batch: WET/44046 Analysis Method: SM 2540D
QC Batch Method: SM 2540D Analysis Description: 2540D Total Suspended Solids
Associated Lab Samples: 60155242001

METHOD BLANK: 1272788 Matrix: Water
Associated Lab Samples: 60155242001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Suspended Solids	mg/L	ND	5.0	10/16/13 11:33	

SAMPLE DUPLICATE: 1272789

Parameter	Units	5088294001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Suspended Solids	mg/L	31.7	25.0	24	25	

SAMPLE DUPLICATE: 1272790

Parameter	Units	60155238002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Suspended Solids	mg/L	ND	ND		25	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: NATIONAL UAO (NATIONAL)
Pace Project No.: 60155242

QC Batch: WET/43972
QC Batch Method: SM 4500-H+B
Analysis Method: SM 4500-H+B
Analysis Description: 4500H+B pH
Associated Lab Samples: 60155242001

SAMPLE DUPLICATE: 1270735

Parameter	Units	60155222001 Result	Dup Result	RPD	Max RPD	Qualifiers
pH at 25 Degrees C	Std. Units	5.5	5.5	0	5	H6

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: NATIONAL UAO (NATIONAL)
Pace Project No.: 60155242

QC Batch: WETA/26699 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 60155242001

METHOD BLANK: 1274375 Matrix: Water
Associated Lab Samples: 60155242001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfate	mg/L	ND	1.0	10/18/13 08:57	

LABORATORY CONTROL SAMPLE: 1274376

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	5	5.0	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1273041 1273042

Parameter	Units	60155239001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	521	250	250	697	738	70	87	80-120	6	15	M1

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: NATIONAL UAO (NATIONAL)
Pace Project No.: 60155242

QC Batch: WETA/3300
QC Batch Method: SM 5310C
Analysis Method: SM 5310C
Analysis Description: 5310C Total Organic Carbon
Associated Lab Samples: 60155242001

METHOD BLANK: 45170 Matrix: Water
Associated Lab Samples: 60155242001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Organic Carbon	mg/L	ND	0.50	10/15/13 12:56	

LABORATORY CONTROL SAMPLE: 45171

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	10	10.0	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 45172 45173

Parameter	Units	60155241001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Total Organic Carbon	mg/L	0.98	10.1	10.1	11.1	10.8	100	97	80-120	3	20	

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: NATIONAL UAO (NATIONAL)
Pace Project No.: 60155242

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PRL - Pace Reporting Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-D	Pace Analytical Services - Dallas
PASI-K	Pace Analytical Services - Kansas City

ANALYTE QUALIFIERS

H6	Analysis initiated outside of the 15 minute EPA recommended holding time.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

Pace Analytical Services, Inc.
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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: NATIONAL UAO (NATIONAL)
Pace Project No.: 60155242

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60155242001	**10835/NAT NE**	EPA 200.7	MPRP/24716	EPA 200.7	ICP/19207
60155242001	**10835/NAT NE**	EPA 200.8	MPRP/24708	EPA 200.8	ICPM/2572
60155242001	**10835/NAT NE**	EPA 200.8	MPRP/24733	EPA 200.8	ICPM/2570
60155242001	**10835/NAT NE**	SM 2540C	WET/44041		
60155242001	**10835/NAT NE**	SM 2540D	WET/44046		
60155242001	**10835/NAT NE**	SM 2540F	WET/43960		
60155242001	**10835/NAT NE**	SM 4500-H+B	WET/43972		
60155242001	**10835/NAT NE**	EPA 300.0	WETA/26699		
60155242001	**10835/NAT NE**	SM 5310C	WETA/3300		

Pace Analytical
www.pacelabs.com

Sample Condition Upon Receipt

WO#: 60155242

60155242

Client Name: Doe Run

Optional
Proj Due Date:
Proj Name:

Courier: Fed Ex ☒ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other ☐

Tracking #: 7968 8060 1957 Pace Shipping Label Used? Yes ☐ No ☒

Custody Seal on Cooler/Box Present: Yes ☒ No ☒ Seals intact: Yes ☒ No ☒

Packing Material: Bubble Wrap ☒ Bubble Bags ☐ Foam ☐ None ☐ Other ☐

Thermometer Used: T-112 / T-194 **Type of Ice:** (Wet) Blue None ☐ Samples received on ice, cooling process has begun.
(circle one)

Cooler Temperature: 2.3, 0.9

Temperature should be above freezing to 6°C

Date and initials of person examining contents: JD 10/10/13 930

Chain of Custody present:	☒Yes ☐No ☐N/A	1.
Chain of Custody filled out:	☒Yes ☐No ☐N/A	2.
Chain of Custody relinquished:	☒Yes ☐No ☐N/A	3.
Sampler name & signature on COC:	☒Yes ☐No ☐N/A	4.
Samples arrived within holding time:	☒Yes ☐No ☐N/A	5.
Short Hold Time analyses (<72hr):	☒Yes ☒No ☐N/A	6. Soil. Soil.
Rush Turn Around Time requested:	☐Yes ☒No ☐N/A	7.
Sufficient volume:	☒Yes ☐No ☐N/A	8.
Correct containers used:	☒Yes ☐No ☐N/A	
Pace containers used:	☒Yes ☐No ☐N/A	9.
Containers intact:	☒Yes ☐No ☐N/A	10.
Unpreserved 5035A soils frozen w/in 48hrs?	☐Yes ☐No ☒N/A	11.
Filtered volume received for dissolved tests?	☐Yes ☐No ☒N/A	12.
Sample labels match COC:	☒Yes ☐No ☐N/A	
Includes date/time/ID/analyses Matrix: water		13.
All containers needing preservation have been checked.	☐Yes ☐No ☒N/A	
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes ☐No ☒N/A	14.
Exceptions: VOA, coliform, TOC, O&G, WI-DRO (water), Phenolics	☒Yes ☐No	Initial when completed n/a — Lot # of added preservative
Trip Blank present:	☐Yes ☐No ☒N/A	
Pace Trip Blank lot # (if purchased): n/a		15.
Headspace in VOA vials (>6mm):	☐Yes ☐No ☒N/A	16.
Project sampled in USDA Regulated Area:	☐Yes ☐No ☒N/A	17. List State:

Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ Date: _____

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

THE DOE RUN COMPANY

Section A — Required Client Information:

Company:	The Doe Run Company
Address:	PO Box 500
Email To:	asanders@doerun.com
Phone: (573) 689-4535	Fax: (573) 244-8179
Requested Due Date/TAT:	5 To 7 Days

Section B — Required Project Information:

Report To:	Amy Sanders
Copy To:	
Purchase Order No.:	
Project Name:	National UAO (National)
Project Number:	

Section C — Invoice Information:

Attention:	Amy Sanders
Company Name:	The Doe Run Company
Address:	PO Box 500, Viburnum, MO 6556
Pace Quote Reference:	
Pace Project Manager:	
Pace Profile #:	

REGULATORY AGENCY: ☐ NPDES ☐ GROUND WATER ☐ UST ☐ RCRA

Site Location STATE: MO

Page: 1 of 1

COC#: 176

60155742

Section C — Required Sample Information

Valid Matrix Codes

MATRIX	CODE
WATER	WT
WASTE WATER	WW
SOIL/SOLID	SL

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED DATE/TIME: COMPOSITE START DATE (mm/dd/yy)	COMPOSITE START TIME (Military)	COMPOSITE END / GRAB DATE (mm/dd/yy)	COMPOSITE END / GRAB TIME (Military)	SAMPLE TEMP AT COLLECTION	Total # OF CONTAINERS	Bottles / Preservatives: 250 mL Unpreserved	500 mL Unpreserved	1 L Unpreserved	250 mL Nitric	250 mL Amber Glass H_2SO_4	250 mL Plastic H_2SO_4	1000 mL Amber HCL	250 mL ZnAc/NaOH	500 mL Amber Glass H_2SO_4	Requested Analysis Filtered (Y/N)	*See Additional Comments Below / ↓ Analysis Test ↓	SEMS Lab Project No / Lab I.D.
1	10834	WW	G			10/10/13			4	1	1	1	1						N N N N N N N N N N N N N N N	CD-D, PB-D, ZN-D, HARD, PH, SO4, SS, TDS, TOC, TSS CD-T, PB-T, ZN-T	Not Rec'd
2																					
3																					
4	10835	WW	G			10/10/13	1250	7°	4	1	1	1	1							CD-D, PB-D, ZN-D, HARD, PH, SO4, SS, TDS, TOC, TSS CD-T, PB-T, ZN-T	Not Rec'd
5																					
6																					
7	10836	WW	G			10/10/13			4	1	1	1	1							CD-D, PB-D, ZN-D, HARD, PH, SO4, SS, TDS, TOC, TSS CD-T, PB-T, ZN-T	Not Rec'd
8																					
9																					
10	10837	WW	G			10/10/13			4	1	1	1	1							CD-D, PB-D, ZN-D, HARD, PH, SO4, SS, TDS, TOC, TSS CD-T, PB-T, ZN-T	Not Rec'd
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ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME (Military)	ACCEPTED BY / AFFILIATION	DATE	TIME (Military)	SAMPLE CONDITIONS
	Amber Nipper	10/10/13	1960		10/10/13	0840	4.3 / 7 / Y / 7

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Amber Nipper

SIGNATURE of SAMPLER: Amber Nipper

DATE Signed (MM/DD/YY): 10/10/13

SAMPLE CONDITIONS: Temp in °C | pH in SU | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N)